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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventors: Peter G. Borden; Jiping Li; Jon Madsen
Assignee: Boxer Cross
Title: Calibration As Well As Measurement On The Same Workpiece During Fabrication
Serial No.: 09/974,571 Filing Date: Oct. 9, 2001
Examiner: Unknown Group Art Unit: 2877
Docket No.: BOX013 US Confirmation No: 1003

Santa Clara, California
January 05, 2004

COMMISSIONER FOR PATENTS
P.O. BOX 1450
ALEXANDRIA, VA 22313-1450

**INFORMATION DISCLOSURE STATEMENT
UNDER 37 CFR §1.97(b)**

Dear Sir:

Pursuant to 37 C.F.R. § 1.56, §1.97 and §1.98, the Applicants submit for consideration in the above-identified patent application the document listed on the accompanying Form PTO-1449. Copies of references numbered 52-86 are submitted herewith. The Examiner is requested to make these documents of record. The remaining references are not attached hereto, because these references are issued patents or publications which are readily available in the U.S. Patent and Trademark Office.

In addition, Applicants submit, for the Examiner's consideration, the prosecution histories of the following co-owned applications/patents, cited by serial number, first named inventor and filing date. The Applicants presume that the Examiner has access to and will review the applications/patents and the files thereof for any office actions, amendments or other materials that may be relevant to the patentability of the claims of the present application.

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Citation of these prosecution histories (including the arguments against patentability advanced by Examiners in their respective Office Actions and the Applicants' arguments in the corresponding Amendments) is in accordance with the recent case DAYCO PRODUCTS, INC. v. TOTAL CONTAINMENT, INC., 02-1497, decided May 23, 2003 by the Court of Appeals for the Federal Circuit. The Examiner is presumed to be knowledgeable about the current case law, including the above-mentioned Dayco case. However, if the Examiner needs a copy of the Dayco case, please call the undersigned.

For any such U.S. patent application(s) that are currently pending, the Applicants further presume that the Examiner will consider any future office actions, amendments or other materials in the file thereof that may be relevant to the patentability of the claims herein. **If the Applicants' understanding in this regard is not correct, please notify the undersigned so that copies of any such documents can be submitted to the Examiner.**

	Serial No.:	First Named Inventor	Date:
1.	10/090,316	Peter G. Borden	03/01/2002
2.	10/090,287	Peter G. Borden	03/01/2002
3.	09/521,232	Peter G. Borden	03/08/2000
4.	10/090,262	Peter G. Borden	03/01/2002
5.	09/788,273	Jiping Li	02/16/2001
6.	10/722,724	Peter G. Borden	11/25/2003
7.	09/095,805	Peter G. Borden	06/10/1998
8.	09/095,804	Peter G. Borden	06/10/1998
9.	09/544,280	Peter G. Borden	04/06/2000
10.	10/269,619	Peter G. Borden	10/11/2002
11.	10/253,119	Peter G. Borden	09/23/2002
12.	10/253,121	Peter G. Borden	09/23/2002
13.	09/274,821	Peter G. Borden	03/22/1999
14.	09/935,128	Peter G. Borden	08/21/2001
15.	09/994,441	Peter G. Borden	11/26/2001
16.	10/223,952	Peter G. Borden	08/19/2002
17.	09/799,481	Peter G. Borden	03/05/2001

This Information Disclosure Statement is submitted pursuant to 37 CFR §1.97(b) as it within three months of the filing date of a national application other than a continued prosecution application and/or before the mailing of a first Office Action on the merits. Accordingly, no fee is required.

Applicants would appreciate the Examiner initialing and returning the Form PTO-1449, indicating that the information has been considered and made of record herein.

The information contained in this Information Disclosure Statement is to the best of my knowledge and is not to be construed as a representation that: (i) a complete search has

been made; (ii) additional information material to the examination of this application does not exist; (iii) the information, protocols, results and the like reported by third parties are accurate or enabling; or (iv) the above information constitutes prior art to the subject invention.

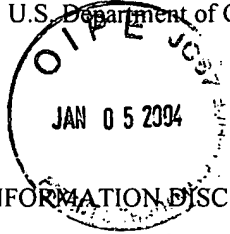
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Respectfully submitted,

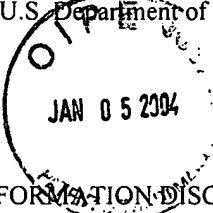


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Attorney for Applicants
Reg. No. 36,320

U.S. Department of Commerce, Patent and Trademark Office  INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)	Application No.:	09/974,571
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	Group Art Unit:	2877
	Examiner Name:	Unknown
	Confirmation No.:	1003
	Attorney Docket No.:	BOX013 US

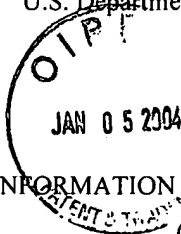
U.S. Patent Documents							
*Examiner Initials		Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
	1.	4,273,421	6/16/81	Gurtler	356	432	
	2.	4,854,710	8/8/89	Opsal et al.	356	432	
	3.	4,211,488	7/8/80	Kleinknecht	356	433	
	4.	5,379,109	1/3/95	Gaskill et al.	356	445	
	5.	6,489,801	12/3/02	Borden et al.	324	766	
	6.	5,966,019	10/12/99	Borden	324	752	
	7.	5,377,006	12/27/94	Nakata	356	349	
	8.	5,706,094	1/6/98	Maris	356	432	
	9.	6,118,533	9/12/00	Banet et al.	356	345	
	10.	6,323,951	11/27/01	Borden et al.	356	502	
	11.	6,426,644	7/30/02	Borden et al.	324	765	
	12.	4,952,063	8/27/90	Opsal et al.	356	432	
	13.	5,042,952	827/1991	Opsal et al.	356	432	
	14.	5,159,412	10/27/92	Willenborg et al.	356	445	
	15.	5,181,080	1/19/93	Fanton et al.	356	381	
	16.	5,228,776	7/20/93	Smith et al.	374	5	
	17.	4,255,971	3/17/81	Rosencwaig	73	606	
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	24.	6,483,594	11/19/02	Borden et al.	356	502	
	25.	5,652,716	7/29/97	Battersby	703	13	

Examiner:	Date Considered:
* Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with your communication with applicant.	

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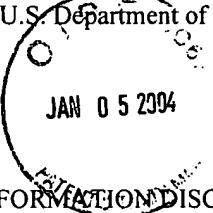
	26.	5,761,082	6/2/98	Miura-Mattausch	703	14	
	27.	4,996,659	2/26/91	Yamaguchi et al.	714	736	
	28.	6,154,280	11/2/00	Borden	356	376	
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	40.	6,486,965	11/26/02	Kim	356	626	
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	45.	4,521,118	06/00/85	Rosencwaig	374	5	
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	47.	5,764,363	6/9/98	Ooki et al.	356	364	
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	49.	4,634,290	1/6/87	Rosencwaig	374	5	
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	51.	4,571,685	02/18/86	Kamoshida	364	468	

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Foreign Patent Documents								
							Translation	
		Document	Date	Country	Class	Subclass	Yes	No
	52.	99/94880	12/16/1999	PCT	G01R	31/26		
	53.	00/07357	3/20/2000	PCT	G01L	21/17		
Other Art (Including Author, Title, Date, Pertinent Pages, Etc.)								
	54.	Rosencwaig et al. "Detection of Thermal Waves Through Optical Reflectance", Appl Phys. Lett. 46, June 1985, pp1013-1015						
	55.	Rosencwaig, "Thermal-Wave Imaging", SCIENCE, Volume 218, No. 4569, Oct. 1982, pp.223-228						
	56.	Opsal et al. "Thermal-Wave Detection and Thin-Film Thickness Measurements with Laser Beam Deflection", Applied Optics, Vol. 22, No. 20, Oct. 1983, pp. 3169-3176						
	57.	Rosencwaig, "Thermal Wave Characterization and Inspection of Semiconductor Materials and Devices", Chapter 5 (pp. 97-135) of Photoacoustic and Thermal Wave Phenomena in Semiconductors, North Holland (month unavailable) 1987						
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	59.	W. L. Smith et al. "Ion Implant Monitoring With Thermal Wave Technology," Nuclear Instruments and Methods Physics Research, B21, (1987), 537-541.						
	60.	J. Opsal, "High Resolution Thermal Wave Measurements and Imaging of Defects and Damage in Electronic Materials" Photoacoustic and Photothermal Phenomena II, Springer Series in Optical Sciences, Vol. 62, Springer Verlag Berlin, Heidelberg, 1990.						
	61.	Jon Opsal, "Modulated Interference Effects and Thermal Wave Monitoring of High-Dose Ion Implantation in Semiconductors," Review of Progress in Quantitative Nondestructive Evaluation, Vol. 8B, Plenum Publishing Corporation, 1989.						
	62.	<u>Quality Today News, article entitled "In-Line Metrology SEM System with 3D Imaging" dated January 10, 2000 and published at http://www.qualitytoday.com/Jan-00-news/011000-3.htm before April 4, 2001</u>						
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	67.	W. L. Smith et al. "Thermal-wave Measurements and Monitoring of TaSiX Silicide Film Properties" J. Vac. Technol.B2(4), Oct.-Dec. 1984, pp. 710-713						

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71.	Per-Eric Nordail et al. "Photothermal Radiometry", Physica Scripta, Vol. 20, 659-662, 1979
72.	A. Rosencwaig, "Thermal Wave Monitoring and Imaging of Electronic Materials and Devices", pp 73-109
73.	A. Rosencwaig, "Applications of Thermal-Wave Physics to Microelectronics", VLSI Electronics, Microstructure Science Vol. 9, 1995, pp 227-288
74.	W. Lee Smith et al., "Voids, Notches and Microcracks in Al Metallization Detected by Nondestructive Thermal Wave Imaging", June 23m 1989, pp. 211-221
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79.	C. G. Welles et al., "High-Resolution Thermal Wave Imaging of Surface and Subsurface Defects in IC Metal Lines", Materials Research Society, SF Marriott, April 27-May 1, 1992, pp 1187-1191
80.	L. Chen et al., "Meta-Probe: A New Generation Photothermal System For Thin Metal Films Characterization" (believed to be prior to March 1, 2002)
81.	L. Chen et al., "Thermal Wave Studies of Thin Metal Films and Structures", (believed to be prior to March 1, 2002)
82.	R. S. Sharpe, "Research Techniques in Nondestructive Testing Vol. VII, Academic Press 1984, pp 158-365
83.	R. L. Thomas et al., "Thermal Wave Imaging For Nondestructive Evaluation" 1982 Ultrasonic Symposium, pp 586-590
84.	G. Slade Cargill III, "Electron-Acoustic Microscopy", Physics Today, October 1981, pp 27-32
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86.	Eric A. Ash, "Acoustical Imaging" Volume 12, Plenum Press, July 19-22, 1982, pp 61-65

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